

REMARKS

Applicant thanks the Examiner for his careful and thorough consideration of this application, as well as for his helpful telephonic and fax communications with the undersigned. Applicant now respectfully requests reconsideration of this application in view of the above amendments and the following remarks.

Claims 1-13 are pending in the application, of which Claims 1, 10, and 13 are independent claims.

Claims 1, 10, and 13 have been amended to spell out the first instance of each acronym (“CI” and “PAPR”) that occurs in each of these independent claims, to address the objection at page 8 of the Office Action.

At pages 2-8, the Office Action objects to the drawings and to the specification based on a number of informalities. Applicant has amended sheets 9, 10, 12, and 13 of the drawings and numerous portions of the specification, to address the objections in the Office Action (as well as to correct a few typographical errors). It is respectfully submitted that no new matter has been added.

With regard to the drawings, it is noted that a new figure, FIG. 10D, has been added. Support for this figure may be found, e.g., at page 37, lines 9 ff. It is respectfully submitted that FIG. 10D helps to address the objection to the drawings at page 3 of the Office Action.

At pages 8-9, the Office Action rejects Claim 13 under 35 U.S.C. § 102(b) as being anticipated by a paper to Natarajan et al. (“the Natarajan paper”). At pages 9-15, the Office Action rejects Claims 1-12 under 35 U.S.C. § 103(a) as being unpatentable over the combination of “Applicant’s Admitted Prior Art” (“AAPA”) in view of a paper to Nassar et al. (“the Nassar paper”). At pages 15-20, the Office Action rejects Claims 1-12 under 35 U.S.C. § 103(a) as

being unpatentable over the combination of AAPA in view of a paper to Wiegandt et al. (“the Wiegandt paper”). These rejections are respectfully traversed for at least the following reasons.

Claim 1 recites, among other things, “a CI coder adapted to perform at least one predetermined combination of data spreading and channel coding to produce a plurality of input symbols.” Claim 10 recites, among other things, “a carrier interferometry (CI) coder adapted to spread at least one data sequence with at least one set of CI codes for generating at least one set of CI-coded symbols”. Claim 13 recites, among other things, “a carrier interferometry (CI) coder adapted to spread at least one data sequence with at least one set of CI codes for generating at least one set of CI-coded symbols.”

Carrier interferometry (CI) coding and CI coders are discussed, for example, at page 7, lines 12-21 of the specification (and elsewhere). As noted in this portion of the specification, “the weight vector is generated from CI codes that map waveform characteristics . . . to spectral coefficients.” It is respectfully submitted that none of the cited references discloses such coding.

Page 1800, Fig. 1, Section 3, and Equation 5 of the Natarajan paper are cited in the rejection of Claim 13 to teach this limitation. However, a close look at the Natarajan paper reveals no such coding. There is merely data modulation shown and discussed. No CI coding is disclosed.

The same comments apply with respect to the cited portions of the Nassar paper and the Wiegandt paper.

For at least these reasons, it is respectfully submitted that Claims 1-13 are allowable over the cited references.

Applicants may not have presented all possible arguments or have refuted the characterizations of either the claims or the prior art as found in the Office Action. However, the

lack of such arguments or refutations is not intended to act as a waiver of such arguments or as concurrence with such characterizations.

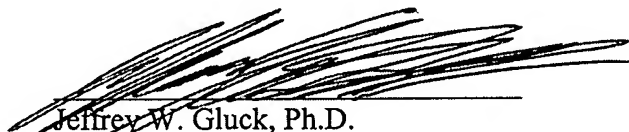
Conclusion

Applicants believe that the above amendments and remarks address all of the grounds for objection and rejection and place the application in condition for allowance. Applicants, therefore, respectfully request prompt and favorable consideration of this Amendment and Reply and reconsideration of this application.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,

Date: *October 23, 2007*



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